Event

MPTS IJET AN 4101 – AN 4105 T-45

Mission

AIRWAYS NAVIGATION

1.6 HOURS/X

ORM

AN 4101-05

- **OPERATIONAL REQUIREMENTS / LIMITATIONS**
  - **CREW REST/ CREW DAY / WORK WEEK**
  - **WARM-UP ELIGIBILITY**
  - **PREVIOUS FLIGHT COMPLETE?**
  - **IP CURRENCY**
  - **READ AND INITIAL**

- **HUMAN FACTORS**
  - **LIFE STRESSORS / EXTERNAL FACTORS/ PERSONAL PROBLEMS**
  - **MEDICAL STATUS**
    - **CREW DAY**
    - **CREW REST**
    - **NOURISHMENT**
    - **HYDRATION**

- **HAZARDS AND CONTROLS**
  - **ROUTINE**
  - **WEATHER**
    - **CURRENT OBSERVATIONS AND FORECASTS**
    - **CROSSWINDS**
    - **FUEL CONSIDERATIONS**

TTO

AN 4101-05

- **WHO WILL CALL A TTO?**

- **WHAT SITUATIONS WILL THE TTO BE CALLED?**
  - **SAFETY**
  - **CONFUSION**
  - **MISUNDERSTANDING**

- **IP RESPONSIBILITIES**
  - **RECOGNIZE THE NEED FOR A TTO**
  - **EXPLANATION / INSTRUCTION AS NECESSARY**
  - **DOCUMENTATION ON ATF**

- **WHEN AND HOW WILL TRAINING RESUME?**

SSR/DISCUSS ITEMS

AN 4101-05

- **SPECIAL SYLLABUS REQUIRMENTS:**
  - **NONE**

- **PREREQUISITES:**
  - **AN 2101**
  - **FAM 4501**

- **DISCUSS ITEMS:**

  AN 4101, 4103, 4104
  - **NATOPS/SOP/EP QOD AND IN-FLIGHT EMERGENCIES.**

  AN 4102, AN 4105
  - **NATOPS/SOP/EP QOD, IN-FLIGHT EMERGENCIES, AND LOST COMMUNICATIONS.**

SYLLABUS NOTES

AN 4101-05

A. IT IS HIGHLY RECOMMENDED THAT NAVIGATION FLIGHTS BE CONDUCTED OUTSIDE THE LOCAL FLYING AREAS TO THE MAXIMUM EXTENT POSSIBLE.

B. TWO OUT-AND-IN FLIGHTS (OUTSIDE THE LOCAL AREA) ARE REQUIRED IN THE AN/IR STAGES PRIOR TO IR 4290. A CROSS-COUNTRY WITH AT LEAST FOUR LEGS MAY BE SUBSTITUTED FOR THIS REQUIREMENT.

C. STUDENTS SHALL CONTACT THEIR IP PRIOR TO BRIEF TO DETERMINE THE ROUTE OF FLIGHT TO PLAN.

D. STUDENTS SHALL BRING A COPY OF A COMPLETED DD-175 AND JET LOG TO THE BRIEF FOR IP USE DURING THE FLIGHT.

E. TWO FLIGHTS IN BLOCK SHALL BE FLOWN FROM THE FRONT COCKPIT. INSTRUCTORS SHOULD TAKE INTO ACCOUNT STUDENT NIGHT LANDING CURRENCY WHEN PLANNING FRONT-COCKPIT NIGHT FLIGHTS. REMAINING FLIGHTS WITHIN BLOCK SHALL BE FLOWN FROM THE REAR COCKPIT WITH THE HOOD INSTALLED.

SYLLABUS NOTES

AN 4101-05

F. THE HUD WILL BE AVAILABLE FOR USE ON ALL FRONT SEAT AN STAGE FLTS.

G. DURING THIS BLOCK, STUDENTS SHALL FLY AT LEAST THE APPROACHES LISTED BELOW:

– PRECISION APPROACH PANEL	4 FULL PANEL/2 PARTIAL
– NON-PRECISION APPROACH PANEL	4 FULL PANEL/2 PARTIAL
– LOW OIL APPROACH	1
– MIN/EMERG FUEL APPROACH	1
– NO-GYRO GCA	1

- **ADVISE YOUR IP – HOW MANY/WHAT TYPE OF APPROACHES REMAIN PRIOR TO END OF BLOCK.**

ADMIN (CARD)

AN 4101-05

- **A/C – ATC C/S – CREW**
- **BRIEF / WALK / TAKEOFF / LAND TIMES**
- **ATC CLEARANCE / DD-175**
- **FUEL PLAN/LADDER**
- **LINE / T/O / ABORT / RPM**
- **COMM PLAN**
- **NAV PLAN**

ADMIN

AN 4101-05

- **LAUNCH**
  - **WEATHER / NOTAMS / TFR / BASH**
  - **PREFLIGHT / START / TAXI**
  - **ITO**
  - **SWAPPING OF CONTROLS**
  - **ENROUTE PROCEDURES**
  - **RADALT USAGE**

- **RTB**
  - **RECOVERY**
  - **DIVERTS**

CONDUCT

AN 4101-05

- **TIMS RESUME REVIEW**
- **REVIEW APPROACH TRACKER**
- **PRACTICE:**
  - **CHECKLISTS/GROUND OPS**
    - **INST CHECKLISTS**
  - **IFR CLEARANCES**
  - **TAKEOFF/DEPARTURE**
  - **INST COMM**
  - **ENROUTE NAVIGATION**
  - **PT-TO-PT NAVIGATION**
  - **ROUTE/DESTINATION CHANGE**
  - **DESCENT/FIELD ENTRY**
  - **PRECISION APPROACH**
    - **GCA PROCEDURES**
    - **GCA PATTERN FIGURE**
  - **NON-PRECISION APPROACH**
  - **PARTIAL PANEL APPROACH**
  - **MIN/EMERGENCY FUEL APPROACH**
  - **LOW OIL APPROACH**
  - **NO-GYRO GCA**
  - **MISSED APPROACH**
  - **PARTIAL PANEL MISSED APPROACH**
  - **LANDINGS**

CONDUCT

AN 4101-05

DID YOU KNOW?

•WHEN AN APPROACH PROCEDURE REQUIRES A PROCEDURE TURN, A MAX SPEED OF 200 KIAS SHOULD BE OBSERVED TO ENSURE CONTAINMENT WITHIN THE OBSTRUCTION CLEARANCE AREA.

•VISUAL DESCENT POINTS (VDP) PROVIDE PILOTS WITH A REFERENCE POINT FOR AN ALLOWABLE DESCENT FROM THE MDA, ASSUMING REQUIRED VISUAL REFERENCES ARE AVAILABLE.

•THE RECOMMENDED METHOD FOR WIND SHEAR REPORTING IS TO STATE THE LOSS OR GAIN OF AIRSPEED AND THE ALTITUDES AT WHICH IT WAS ENCOUNTERED.

BLOCK MIF

AN 4101-05

CTS REF	MANEUVER	AN4105
1	General Knowledge/Procedures	4+
2	Emergency Procedures	3+
3	Headwork/Situational Awareness	3+
4	Basic Airwork	4+
5	Mission Planning/Briefing/ Debriefing	4+
6	Communications	3+
7	Ground Operations	4+
8	Flight Admin	4+
10	Takeoff	4+
11	Departure	4+
12	Enroute Navigation	4+
12	Point-to-Point Navigation	3+
18	Route Destination Change	3
13	Descent/Field Entry	4+
17	Precision Approach	4+
18	Non-Precision Approach	4+
17 18 5	Partial Panel Approach	4+
21	Min/Emergency Fuel Approach	4+

CTS REF	MANEUVER	AN4105
21	Low Oil Approach	4+
17	No-Gyro GCA	4+
20	Missed Approach	4+
20 5	Partial Panel Missed Approach	4+
23	Landing(s)	3+

Emergencies

AN 4101-05

- **AIRCRAFT FALLOUT**
- **CLEAR ENGINE PROCEDURE**
- **ABORTED TAKEOFF**
- **RWY DEP / LOSS OF DIRECTIONAL CONTROL**
- **SYSTEM FAILURES/ EPs / CRM**
- **BIRD STRIKE/ MIDAIR**
- **RADIO/ ICS FAILURE**
- **LOSS OF NAVAIDS / LOST PLANE**
- **INADVERTENT IMC / LOST SIGHT / LCLS**
- **DISORIENTATION / VERTIGO**
- **HYPOXIA**
- **EJECTION (HIGH / LOW / GROUND)**
- **SAR / ON SCENE COMMANDER**
- **DIVERT(S) / BINGO FUEL TO DIVERT**

STANDARD DEBRIEFING FORMAT

AN 4101-05

- THE FLIGHT LEAD OR PILOT-IN-COMMAND IS RESPONSIBLE FOR ENSURING ALL FLIGHT OR CREWMEMBERS ARE THOUROUGHLY DEBRIEFED ON THE CONDUCT OF THE MISSION UTILIZING THE "S-P-B-E-MS-LL" FORMAT OUTLINED BELOW.

I. SAFETY
II. PLANNING
III. BRIEF
IV. EXECUTION
V. MISSION SUCCESS
VI. LESSONS LEARNED